

palliative therapy, simple WBRT or simple chemotherapy, combined radiochemotherapy, stereotactic linac-based radiosurgery plus chemotherapy/ WBRT and neurosurgical resection plus chemotherapy/ WBRT. Ninety-two specimens of lung cancer were examined for P53, nm23 and VEGF by immunohistochemical staining. Survival analysis was compared with Kaplan-Meier method and log-rank test was used respectively. Statistical significance was defined as  $P < 0.05$ .

**Results:** The univariate analysis showed that performance status, age, the number of brain metastases, the absence or presence of extracranial metastases and metastatic symptoms had influences over survival period. The multivariate analysis showed that performance status, age and the absence or presence of extracranial metastases were related to prognosis. The median survival time of patients receiving palliative therapy, simple WBRT or simple chemotherapy, combined radiochemotherapy, stereotactic linac-based radiosurgery plus chemotherapy/ WBRT and neurosurgical resection plus chemotherapy/ WBRT was 1.7 months, 3.2 months, 9.0 months, 10.6 months and 17.1 months respectively. The median survival time of patients with P53(+)/P53(-), nm23(+)/(-) and VEGF(+)/(-) was 11.7/10.6 months ( $P = 0.5179$ ), 12.8/9.9 months ( $P = 0.1075$ ) and 10.6/12.0 months ( $P = 0.0231$ ) respectively.

**Conclusions:** Performance status, age and the absence or presence of extracranial metastases are the independent prognostic factors. The patients with PS score 0~1, age < 60 years and the absence of extracranial metastases have longer survival time and they would benefit from aggressive treatment modalities. Either combined radiochemotherapy or stereotactic linac-based radiosurgery plus chemotherapy/ WBRT is effective. There is a longer survival tendency in patients receiving stereotactic linac-based radiosurgery plus chemotherapy/ WBRT. The expression of VEGF is related to the survival of the patients while the expression of P53 and nm23 is unrelated to the survival time. The patients with VEGF positive expression have shorter survival time.

P2-182

NSCLC: Combined Modality Therapy Posters, Tue, Sept 4

#### **Feasibility of sleeve lobectomy with induction chemoradiotherapy: Analysis of morbidity and recurrence pattern compared with sleeve lobectomy without induction therapy**

Hirami, Yuji; Date, Hiroshi; Tao, Hiroyuki; Yamane, Masaomi; Toyooka, Shinichi; Aoe, Motoi; Sano, Yoshifumi

Dept. of Cancer and Thoracic Surgery, Graduate School of Medicine, Dentistry, and Pharmaceutical Science, Okayama University, Okayama, Japan

**Purpose:** The purpose of this study was to evaluate the feasibility of sleeve lobectomy after induction chemoradiotherapy.

**Methods:** We reviewed seven patients who underwent sleeve lobectomy after induction chemoradiotherapy (Group A) for locally advanced non-small cell lung cancer, and 19 patients who underwent sleeve lobectomy without induction therapy (Group B).

**Results:** The complication of group A was in 3 (33%) of 7 cases, 1 necrosis of apex of lower lobe, 1 atelectasis and 1 arrhythmia. Of group B was in 9 (47%) of 19 cases, 2 failure of anastomosis, 3 air leakage > 7 day, 3 wound infection, 2 arrhythmia, 2 recurrent nerve palsy, and 1 pneumonia. The recurrence of group A was in 2 (29%) of 7 cases. One case was brain on the 220th and pulmonary on the 430th. Another one case was kidney on the 365th and duodenum on the 700th. The recurrence of group B was in 3 (16%) of 19 cases, which were observed in 1 pulmonary, 1 skin, and 1 plural, respectively.

**Conclusions:** The complication of bronchial anastomosis and local recurrence was not permitted in group A. Although it is a small number of study, sleeve lobectomy with induction chemoradiotherapy is considered to be feasible technique from safety and oncologically.

P2-183

NSCLC: Combined Modality Therapy Posters, Tue, Sept 4

#### **Gemcitabine weekly as a radiosensitiser for the treatment of brain metastases in patients with non-small cell lung cancer: a phase I study**

Huang, Yujuan; Wu, Yilong; Xie, Songxi; Yang, Jing-Ji; Huang, Yi-Sheng; Lioa, Ri-Qiang

Lung Cancer Institute of Guangdong Provincial People's Hospital, Guangzhou, China

**Background:** Conventional treatment for non-small cell lung cancer (NSCLC) brain metastases (BM) is whole-brain radiotherapy (WBRT). The efficacy is limited. It might be increased by a potent radiosensitiser such as gemcitabine, which is believed to cross the disrupted blood-brain barrier. Primary objective of this study was to determine the maximum tolerated dose (MTD) of weekly gemcitabine given concurrently with WBRT.

**Methods:** Patients with BM from NSCLC were included. The dose of WBRT was 3750 cGy (total 15 times, 3 weeks). Gemcitabine was given concurrent with WBRT on days 1 and 8 and 15. Starting dose was 400 mg/m<sup>2</sup>, escalated by 100 mg/m<sup>2</sup> increments. At least three patients were included per level. Dose limiting toxicity (DLT) was defined as grade 4 hematological or grade 2 neurological toxicity. When two or more patients experience DLT, the MTD was reached.

**Results:** A total of 16 patients were included; 69% had a PS 1. A total of 69% had concurrent active extra cranial diseases. All had more than 3 BM. Up to 600 mg/m<sup>2</sup> (level 3) no neurology toxicity was observed. At 600 mg/m<sup>2</sup>, two out of 6 patients developed grade 4 thrombocytopenia. One of the two patients' thrombocytopenia was confused with disseminated intravascular coagulation (DIC). At 700 mg/m<sup>2</sup>, two out of 4 patients developed neurotoxicities. One developed grade 3 seizure and confusion. Another patient developed suspected grade 2 muscle weakness (neuropathy motor).

**Conclusions:** The MTD was reached at dose 700 mg/m<sup>2</sup>. The dose of 600 mg/m<sup>2</sup> would be considered for further study.

This study was supported by the China Society Clinical of Oncology foundation (No. Y-2005--0010)

P2-184

NSCLC: Combined Modality Therapy Posters, Tue, Sept 4

#### **Safety study of induction chemotherapy followed by Synchronous Radiotherapy (RT) and cetuximab in stage III non-small cell lung cancer (NSCLC): SCRATCH study (Cohort I)**

Hughes, Simon<sup>1,2</sup> Liong, Janet<sup>2</sup> Miah, Aisha<sup>2</sup> Ahmad, Shahreen<sup>2</sup> Leslie, Martin<sup>2</sup> Harper, Peter<sup>2</sup> Gershuny, Anthony<sup>3</sup> Prendiville, Joseph<sup>2</sup> Rankin, Sheila<sup>4</sup> Gaya, Andrew<sup>2</sup> Ross, Paul<sup>2</sup> Subramanian, Ramachandran<sup>2</sup> Shamash, Jonathan<sup>3</sup> Landau, David<sup>1,2</sup>

<sup>1</sup> Department of Imaging Sciences, King's College London, UK <sup>2</sup> Oncology Department, Guy's & St. Thomas' NHS Trust, London, UK, London, UK <sup>3</sup> Oncology Department, Queen's Hospital, London, UK, London, UK <sup>4</sup> Radiology Department, Guy's & St. Thomas' NHS Trust, London, UK, London, UK